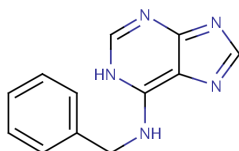


Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

ACToR: Aggregated Computational Toxicology Resource

ACToR Database: actor_2012q1

ToxRefDB Database: toxrefdb_2010q1b



GCID	44615
MESH DESCRIPTION	Plant Growth Regulators : Plant Growth Regulators
CASRN	1214-39-7
FORMULA	C ₁₂ H ₁₁ N ₅
MW	225.2492
SMILES	c1ccc(cc1)CNc2c- 3ncnc3nc[nH]2
SOURCE	DSSTOX

Synonyms

"1H-Purin-6-amine, N-(phenylmethyl)-"
 "6-Benzylaminopurine"
 "Adenine, N-benzyl-"
 "Benzyladenine"
 "N-(Phenylmethyl)-1H-purin-6-amine"
 "N-benzyladenine, monopotassium salt"
 "N-benzyladenine, monosodium salt"
 "N6-Benzyladenine"
 ((2r,3s,4r,5r)-5-(4-amino-2-oxopyrimidin-1(2h)-yl)-3,4-dihydroxytetrahydrofuran-2-yl)methyltriphosph
 1214-39-7
 124786-41-0
 1H-PURIN-6-AMINE, N-(PHENYLMETHYL)-
 3458-19-3
 6-(Benzylamino)purine
 6-(n-benzyl)aminopurine
 6-(N-Benzylamino)purine
 6-BA
 6-BA cpd
 6-BAP
 6-Benzyl adenine
 6-Benzyl aminopurine
 6-Benzyladenine
 6-benzyladenine 6-benzylaminopurine
 6-Benzylaminopurine
 6-Benzylaminopurine (N6-Benzuladenine)
 6-Benzylaminopurine; Benzyl Kinetin
 9H-Purin-6-amine, N-(phenylmethyl)-
 ABG 3034
 Adenine, N(sup 6)-benzyl-
 Adenine, N-benzyl-
 Adenine, N-benzyl- (8CI)
 Aminopurine, 6-benzyl
 BA
 BA (Growth stimulant)
 BA (growth stimulator)
 BAP
 BAP (cytokinin)
 BAP (growth stimulant)
 benzyl(purin-6-yl)amine
 benzyl-(7h-purin-6-yl)-amine
 BENZYLADENINE
 Benzylaminopurine
 benzylaminopurine, 6-
 C11263
 Caswell No. 081EE
 CCRIS 4351
 Cytokinin B
 Cytokinins
 Cytokinins 3/
 EINECS 214-927-5
 EPA Pesticide Chemical Code 116901
 n(6)-benzyladenine
 N(6)-Benzylaminopurine
 N(sup 6)-(Benzylamino)purine
 N(sup 6)-Benzyladenine
 N-(Phenylmethyl)-1h-purin-6-amine
 N-(Phenylmethyl)-1H-purin-6-amine[United States Environmental Protection Agency/ Prevention
 N-6-Benzyladenine
 N-benzyl-1H-purin-6-amine
 N-Benzyl-9H-purin-6-amine; N6-Benzyladenine; Aminopurine, 6-benzyl
 N-benzyladenine
 N6 -Benzyladenine
 N6-BENZYL ADENINE

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

N6-Benzyladenine
n6-benzylaminopurine
NSC 40818
NSC40818
NULL
PC Code 116801
PC Code 116901
Prestwick_414
Pro-Shear
S Code 763
SD 4901
SQ 4609
USEPA/OPP Pesticide Code: 116901[National Pesticide Information Retrieval System's USEPA/OPP Chemical Ingredients Database on Benzyladenine (1214-39-7). Available from
Verdan senescence inhibitor
ZINC00043479

Toxicology Data

Hazard

ABC (American Bird Conservancy) Pesticide Toxicity Data Table

Result group:

Component Name	Value
If extrapolated, # species.	1
Pesticide type	Plant growth regulator

Canada Domestic Substance List (2007)

Result group:

Component Name	Value
Bioaccumulative	No
Inherently Toxic to Aquatic Organisms	No
Meets CEPA Categorization Criteria	No
Meets Environmental Criteria for Categorization	No
Meets Human Health Criteria	No
Persistent	No
Substance category	Organics

EPA Biopesticide Fact Sheets URL

Result group:

Component Name	Value
EPA Pesticide Fact Sheet (PFS) Biopesticide URL	External Link
EPA Pesticide Reregistration Eligibility Decision (RED) Factsheet URL	External Link

Scorecard URLs

Result group:

Component Name	Value
Scorecard URL	External Link

Result group:

Component Name	Value
Scorecard URL	External Link

Scorecard Health Effects Summaries

Result group:

Component Name	Value
Health Impact Type	Suspected Neurotoxicant
References	RTECS

Result group:

Component Name	Value
Health Impact Type	Suspected Skin Or Sense Organ Toxicant
References	RTECS

NLM TOXNET HSDB URL

Result group:

Component Name	Value
HSDB URL	External Link

NLM TOXNET HSDB Hazard Information

Result group:

Component Name	Value
SERI - SKIN, EYE AND RESPIRATORY IRRITATIONS	Causes eye irritation /6-Benzylaminopurine Technical/[NCA Biotech, Inc; Product Safety Sheet for 6-Benzylaminopurine Technical for manufacturing, reformulating or compounding use only. (July 27, 2007) Available from, as of November 3, 2008: http://www.epa.gov/pesticides/pestlabels/] **PEER REVIEWED**

Result group:

Component Name	Value
EQUIP - PROTECTIVE EQUIPMENT & CLOTHING	The Agencies Worker Protection Standard (WPS) sets standards for Personal Protective Equipment (PPE) for pesticide products based on the acute toxicity of the end-use product. Because the formulated products which contain N6-benzyladenine are in toxicity category II, the use of the following PPE is required: coveralls over short-sleeved shirt and short pants; chemical-resistant footwear plus socks; chemical-resistant gloves; chemical-resistant headgear for overhead exposure; respiratory protection devices; protective eyewear; and chemical-resistant apron when cleaning equipment, mixing, or loading.[USEPA; Reregistration Eligibility Decision (RED) Database for N6 Benzyladenine (1214-39-7) p.8 (June 1994). Available from, as of October 17, 2008: http://www.epa.gov/opp00001/reregistration/status_page_n.htm] **PEER REVIEWED**

Result group:

Component Name	Value
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Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

EQUIP - PROTECTIVE EQUIPMENT & CLOTHING

The use of a respirator and chemical-resistant gloves is also expected to adequately protect the applicator and mixer/loader ... The primary route of exposure is expected to be dermal. Chemical-resistant gloves and appropriate respiratory protection devices will mitigate the exposure substantially and adequately.[USEPA; Reregistration Eligibility Decision (RED) Database for N6-Benzyladenine (1214-39-7) p.8 (June 1994). Available from, as of October 17, 2008: http://www.epa.gov/opp00001/reregistration/status_page_n.htm] **PEER REVIEWED**

Result group:

Component Name	Value
EQUIP - PROTECTIVE EQUIPMENT & CLOTHING	AGRICULTURAL USE REQUIREMENTS. Use this product only in accordance with its labelling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on the label about personal protective equipment (PPE) and restricted entry intervals. ... Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 12 hours. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as, plants, soil or water is: Coveralls; Shoes plus socks; Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride or viton. /Configure/[Fine Agrochemicals Ltd; Product Label for Configure (June 11, 2007) Available from, as of November 3, 2008: http://www.epa.gov/pesticides/pestlabels/] **PEER REVIEWED**

Result group:

Component Name	Value
EQUIP - PROTECTIVE EQUIPMENT & CLOTHING	Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category C on an EPA chemical-resistance selection chart. Applicators and other handlers must wear: Longsleeved shirt and long pants; Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride or viton; Socks and shoes. Follow the manufacturers instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE items separately from other laundry. /Configure/[Fine Agrochemicals Ltd; Product Label for Configure (June 11, 2007) Available from, as of November 3, 2008: http://www.epa.gov/pesticides/pestlabels/] **PEER REVIEWED**

Result group:

Component Name	Value
OPRM - OTHER PREVENTIVE MEASURES	SRP: The scientific literature for the use of contact lenses in industry is conflicting. The benefit or detrimental effects of wearing contact lenses depend not only upon the substance, but also on factors including the form of the substance, characteristics and duration of the exposure, the uses of other eye protection equipment, and the hygiene of the lenses. However, there may be individual substances whose irritating or corrosive properties are such that the wearing of contact lenses would be harmful to the eye. In those specific cases, contact lenses should not be worn. In any event, the usual eye protection equipment should be worn even when contact lenses are in place. **PEER REVIEWED**

Result group:

Component Name	Value
OPRM - OTHER PREVENTIVE MEASURES	The Worker Protection Standard requires a Restricted Entry Interval (REI) of 12 hours for pesticide active ingredients /such as N6-benzyladenine/ with acute dermal toxicity and skin and eye irritation in toxicity categories III and IV.[USEPA; Reregistration Eligibility Decision (RED) Database for N6-Benzyladenine (1214-39-7) p.8 (June 1994). Available from, as of October 17, 2008: http://www.epa.gov/opp00001/reregistration/status_page_n.htm] **PEER REVIEWED**

Result group:

Component Name	Value
OPRM - OTHER PREVENTIVE MEASURES	Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. /Configure/[Fine Agrochemicals Ltd; Product Label for Configure (June 11, 2007) Available from, as of November 3, 2008: http://www.epa.gov/pesticides/pestlabels/] **PEER REVIEWED**

Result group:

Component Name	Value
OPRM - OTHER PREVENTIVE MEASURES	If on skin or clothing take off contaminated clothing and rinse skin immediately with plenty of water for 15-20 minutes. /Configure/[Fine Agrochemicals Ltd; Product Label for Configure (June 11, 2007) Available from, as of November 3, 2008: http://www.epa.gov/pesticides/pestlabels/] **PEER REVIEWED**

Result group:

Component Name	Value
OPRM - OTHER PREVENTIVE MEASURES	SRP: Contaminated protective clothing should be segregated in such a manner so that there is no direct personal contact by personnel who handle, dispose, or clean the clothing. Quality assurance to ascertain the completeness of the cleaning procedures should be implemented before the decontaminated protective clothing is returned for reuse by the workers. Contaminated clothing should not be taken home at end of shift, but should remain at employees place of work for cleaning. **PEER REVIEWED**

Result group:

Component Name	Value
OPRM - OTHER PREVENTIVE MEASURES	Avoid contact with eyes and clothing. Harmful if inhaled. Avoid breathing spray dust. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. /6-Benzylaminopurine Technical/[NCA Biotech, Inc; Product Safety Sheet for 6-Benzylaminopurine Technical for manufacturing, reformulating or compounding use only. (July 27, 2007) Available from, as of November 3, 2008: http://www.epa.gov/pesticides/pestlabels/] **PEER REVIEWED**

Result group:

Component Name	Value
STRG - STORAGE CONDITIONS	Do not contaminate water, food, or feed by storage and disposal. PESTICIDE STORAGE: Keep containers tightly closed when not in use. /6-Benzylaminopurine Technical/[NCA Biotech, Inc; Product Safety Sheet for 6-Benzylaminopurine Technical for manufacturing, reformulating or compounding use only. (July 27, 2007) Available from, as of November 3, 2008: http://www.epa.gov/pesticides/pestlabels/] **PEER REVIEWED**

Result group:

Component Name	Value
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Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

DISP - DISPOSAL METHODS

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. CONTAINER DISPOSAL: Completely empty bag into manufacturing equipment. Then dispose of empty bag in /accordance with Federal, state, and local laws/. /6-Benzylaminopurine Technical/[NCA Biotech, Inc; Product Safety Sheet for 6-Benzylaminopurine Technical for manufacturing, reformulating or compounding use only. (July 27, 2007) Available from, as of November 3, 2008: <http://www.epa.gov/pesticides/pestlabels/>] **PEER REVIEWED**

Result group:

Component Name	Value
DISP - DISPOSAL METHODS	Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your Regional Office of the EPA. Do not contaminate water when disposing of equipment washwaters. /6-Benzylaminopurine Technical/[NCA Biotech, Inc; Product Safety Sheet for 6-Benzylaminopurine Technical for manufacturing, reformulating or compounding use only. (July 27, 2007) Available from, as of November 3, 2008: http://www.epa.gov/pesticides/pestlabels/] **PEER REVIEWED**

Result group:

Component Name	Value
DISP - DISPOSAL METHODS	For terrestrial uses. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate...Do not apply this product through any type of irrigation system. /Configure/Fine Agrochemicals Ltd; Product Label for Configure (June 11, 2007) Available from, as of November 3, 2008: http://www.epa.gov/pesticides/pestlabels/] **PEER REVIEWED**

Result group:

Component Name	Value
DISP - DISPOSAL METHODS	SRP: The most favorable course of action is to use an alternative chemical product with less inherent propensity for occupational exposure or environmental contamination. Recycle any unused portion of the material for its approved use or return it to the manufacturer or supplier. Ultimate disposal of the chemical must consider: the materials impact on air quality; potential migration in soil or water; effects on animal, aquatic, and plant life; and conformance with environmental and public health regulations. **PEER REVIEWED**

Result group:

Component Name	Value
ANTR - ANTIDOTE AND EMERGENCY TREATMENT	/SRP:/ Immediate first aid: Ensure that adequate decontamination has been carried out. If patient is not breathing, start artificial respiration, preferably with a demand valve resuscitator, bag-valve-mask device, or pocket mask, as trained. Perform CPR if necessary. Immediately flush contaminated eyes with gently flowing water. Do not induce vomiting. If vomiting occurs, lean patient forward or place on the left side (head-down position, if possible) to maintain an open airway and prevent aspiration. Keep patient quiet and maintain normal body temperature. Obtain medical attention. /Poisons A and B/[Currance, P.L. Clements, B., Bronstein, A.C. (Eds.); Emergency Care For Hazardous Materials Exposure. 3Rd edition, Elsevier Mosby, St. Louis, MO 2005, p. 160] **PEER REVIEWED**

Result group:

Component Name	Value
ANTR - ANTIDOTE AND EMERGENCY TREATMENT	/SRP:/ Basic treatment: Establish a patent airway (oropharyngeal or nasopharyngeal airway, if needed). Suction if necessary. Watch for signs of respiratory insufficiency and assist ventilations if needed. Administer oxygen by nonrebreather mask at 10 to 15 L/min. Monitor for pulmonary edema and treat if necessary. ... Monitor for shock and treat if necessary. ... Anticipate seizures and treat if necessary. ... For eye contamination, flush eyes immediately with water. Irrigate each eye continuously with 0.9% saline (NS) during transport. ... Do not use emetics. For ingestion, rinse mouth and administer 5 mL/kg up to 200 mL of water for dilution if the patient can swallow, has a strong gag reflex, and does not drool. ... Cover skin burns with dry sterile dressings after decontamination. ... /Poisons A and B/[Currance, P.L. Clements, B., Bronstein, A.C. (Eds.); Emergency Care For Hazardous Materials Exposure. 3Rd edition, Elsevier Mosby, St. Louis, MO 2005, p. 160] **PEER REVIEWED**

Result group:

Component Name	Value
ANTR - ANTIDOTE AND EMERGENCY TREATMENT	/SRP:/ Advanced treatment: Consider orotracheal or nasotracheal intubation for airway control in the patient who is unconscious, has severe pulmonary edema, or is in severe respiratory distress. Positive-pressure ventilation techniques with a bag valve mask device may be beneficial. Consider drug therapy for pulmonary edema. ... Consider administering a beta agonist such as albuterol for severe bronchospasm. ... Monitor cardiac rhythm and treat arrhythmias as necessary. ... Start IV administration of D5W /SRP: To keep open, minimal flow rate/. Use 0.9% saline (NS) or lactated Ringers if signs of hypovolemia are present. For hypotension with signs of hypovolemia, administer fluid cautiously. Watch for signs of fluid overload. ... Treat seizures with diazepam or lorazepam. ... Use proparacaine hydrochloride to assist eye irrigation. ... /Poisons A and B/[Currance, P.L. Clements, B., Bronstein, A.C. (Eds.); Emergency Care For Hazardous Materials Exposure. 3Rd edition, Elsevier Mosby, St. Louis, MO 2005, p. 160-1] **PEER REVIEWED**

Result group:

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Acute Exposure/ Benzyladenine suspended in 0.5% Methocel was tested in an acute oral toxicity study at doses of 0.94 to 3.0 g/kg in rats. ... Signs of toxicity included decreased activity, ataxia, dyspnea and tremors. In an acute dermal toxicity test, 2/20 males and 2/20 female rabbits died after a single dermal dose of 5 g/kg of N-6 benzyladenine, which produced symptoms of ataxia, decreased activity, tremors, paresis and dyspnea.[USEPA; Reregistration Eligibility Decision (RED) Database for N6 Benzyladenine (1214-39-7). (June 1994). Available from, as of October 17, 2008: http://www.epa.gov/opp00001/reregistration/status_page_n.htm] **PEER REVIEWED**

Result group:

Component Name	Value
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Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

NTOX - NON-HUMAN TOXICITY EXCERPTS

/LABORATORY ANIMALS: Acute Exposure/ 6-Benzyl adenine (99.0% pure) was administered as a dust by whole body inhalation at analytical concentrations of 1.2, 4.7, 6.2, 4.6 or 7.4 mg/L for a single 4 hour exposure to 5 Sprague-Dawley CD rats/sex/group. Data from the 4.7 and 7.4 mg/L were excluded due to the high variability /concentrations measured/ in samples. Animals were observed for 14 days. Labored breathing was the most notable sign for all groups except for group V (1.2 mg/L). The mass median aerodynamic diameter ranged from 2.6 to 6.2 micrometers and the geometric standard deviation ranged from 2.0 to 5.7 micrometers. At least 68% of particles were 10 micrometers or less.[California Environmental Protection Agency/Department of Pesticide Regulation; SUMMARY OF TOXICOLOGY DATA CYTOKININ and 6-Benzyladenine [Promalin] p. 6 (2002). Available from, as of October 14, 2008: <http://www.cdpr.ca.gov/docs/risk/toxsums/pdfs/2082.pdf>] **PEER REVIEWED**

Result group:

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Acute Exposure/ A dose of 0.5 g of 6-benzyladenine (99.0% pure), slightly moistened with 0.5 mL water, was applied once to the clipped skin for 4 hours to 3 New Zealand White rabbits/sex. The site was covered. Skin was examined and scored for irritation at 30 to 60 minutes, 24, 48 and 72 hours and days 4, 5 and 6. Very slight to well defined erythema was present in all 6 rabbits at 30 to 60 minutes and in 3 rabbits at 24 hours. Very slight erythema was seen in 3 rabbits at 48 and 72 hours and persisted in 2 rabbits through day 5. All were clear after day 5. No edema was reported. The test article was considered a mild to slight irritant over 72 hours with a primary irritation index of 0.7.[California Environmental Protection Agency/Department of Pesticide Regulation; SUMMARY OF TOXICOLOGY DATA CYTOKININ and 6-Benzyladenine [Promalin] p. 4 (2002). Available from, as of October 14, 2008: http://www.cdpr.ca.gov/docs/risk/toxsums/pdfs/2082.pdf] **PEER REVIEWED**

Result group:

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Acute Exposure/ 6-Benzyladenine, at a concentration of 25% (w/v in acetone), was applied dermally (6 hrs) to 10 guinea pigs/sex (induction 3x + challenge 1x) and 5 Guinea pigs/sex (naive control [1x challenge]). No evidence of sensitization. No significant effect on body weight.[California Environmental Protection Agency/Department of Pesticide Regulation; SUMMARY OF TOXICOLOGY DATA CYTOKININ and 6-Benzyladenine [Promalin] p. 6 (2002). Available from, as of October 14, 2008: http://www.cdpr.ca.gov/docs/risk/toxsums/pdfs/2082.pdf] **PEER REVIEWED**

Result group:

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Acute Exposure/ In acute toxicity studies, N6-benzyladenine is slightly toxic by the oral route and produces moderate eye irritation; it has been placed in Toxicity Category III (the second-to-lowest of four categories) for these effects. It is of relatively low acute dermal and inhalation toxicity, and is only a slight irritant to the skin; it has been placed in Toxicity Category IV for these effects.[USEPA; R.E.D. FACTS N6-Benzyladenine p.2 EPA-738-F-94-008 (June 1994)] **PEER REVIEWED**

Result group:

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Subchronic or Prechronic Exposure/ N6-Benzyladenine fed to rats for 13 weeks produced decreased weight gain at 1500 and 5000 ppm (121 and 322 mg/kg/day) in females, and 5000 ppm (295 mg/kg/day) in males. This decreased weight gain appeared to be related to decreased food consumption. Serum alkaline phosphatase activity and blood urea nitrogen levels were increased in both sexes receiving 5000 ppm; thus the NOEL was 1500 ppm and the LOEL was 5000 ppm (approximately 304 mg/kg/day in both sexes), based on the decreased body weight gain, food consumption, increased blood urea nitrogen, and minimal histologic changes in the kidneys.[USEPA; Reregistration Eligibility Decision (RED) Database for N6 Benzyladenine (1214-39-7). (June 1994). Available from, as of October 17, 2008: http://www.epa.gov/opp00001/reregistration/status_page_n.htm] **PEER REVIEWED**

Result group:

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Subchronic or Prechronic Exposure/ Technical 6-benzyladenine (99%) was admixed with the feed at concentrations of 0, 500, 1500 or 5000 ppm and fed for 13 weeks to 20, 10, 10, and 20 CrI:CDBR rats/sex/group, respectively. These doses were equivalent in males to 0, 34.12, 101.5 and 294.78 mg/kg and in females, 0, 41.20, 119.88 and 322.26 mg/kg. Ten of the control and high dose animals were continued on control diet until week 18 for recovery. High-dose animals (M and F) and mid-dose females had significantly lower body weight and food consumption. During the recovery period, the high dose animals gained considerably more weight than the controls and had comparable food consumption. Animals at the high dose appeared thin, hunched and had decreased feces. Lower glucose and elevated hemoglobin, hematocrit, urea nitrogen, inorganic phosphorus and potassium associated with renal injury (postrenal azotemia) for the high dose group were considered treatment-related effects. Body weight NOEL = 500 ppm/day. Histological NOEL = 1500 ppm/day, based on kidney findings.[California Environmental Protection Agency/Department of Pesticide Regulation; SUMMARY OF TOXICOLOGY DATA CYTOKININ and 6-Benzyladenine [Promalin] p. 2 (2002). Available from, as of October 14, 2008: http://www.cdpr.ca.gov/docs/risk/toxsums/pdfs/2082.pdf] **PEER REVIEWED**

Result group:

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Developmental toxicity in rats fed N6-benzyladenine was manifested as significantly decreased fetal body weight, increased incidence of hydrocephalus and unossified sternebrae, incompletely ossified phalanges, and malaligned sternebrae at 175 mg/kg/day. Maternal toxicity was also observed at 175 mg/kg/day, which was manifested as significantly decreased body weight, weight gain, and food consumption. Thus the NOEL and LOEL for maternal and developmental toxicity was 50 and 175 mg/kg/day, respectively.[USEPA; Reregistration Eligibility Decision (RED) Database for N6 Benzyladenine (1214-39-7). (June 1994). Available from, as of October 17, 2008: http://www.epa.gov/opp00001/reregistration/status_page_n.htm] **PEER REVIEWED**

Result group:

Component Name	Value
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Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

NTOX - NON-HUMAN TOXICITY EXCERPTS

/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ The effects of orally administered 6- Benzyladenine on the embryonic and fetal development of the rat /were evaluated/. 6-Benzyl adenine (99.2%) was administered via gavage at doses of 0 (0.2% hydroxypropylmethyl cellulose), 15, 50, or 175 mg/kg to 25 pregnant rats/group during days 6 through 15 of gestation. Food consumption, body weight and body weight gain were reduced for the high dose maternal group. Maternal NOEL = 50 mg/kg/day. Fetal weight was reduced 10% for the high dose group. No malformations or other fetal effects were noted. Developmental NOEL = 50 mg/kg/day.[California Environmental Protection Agency/Department of Pesticide Regulation; SUMMARY OF TOXICOLOGY DATA CYTOKININ and 6-Benzyladenine [Promalin] p. 4 (2002). Available from: as of October 14, 2008: <http://www.cdpr.ca.gov/docs/risk/toxsums/pdfs/2082.pdf>] **PEER REVIEWED**

Result group:

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/GENOTOXICITY/ Studies of the effect of benzyladenine (BA) on the yeast <i>Saccharomyces cerevisiae</i> , the bacterium <i>Salmonella typhimurium</i> , the shallot <i>Allium ascalonicum</i> and Chinese hamster fibroblast cells were performed. The tested substance had no mutagenic activity on yeast, bacteria and cultured fibroblast cells. Changes in mitotic activity and cell division abnormalities were observed after BA treatment in shallot root-tip cells.[Pavlica M et al; Mutat Res 281 (4): 277-82 (1992)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result group:

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/GENOTOXICITY/ 6-Benzyladenine (99.6%) was administered once by oral gavage at doses of 0 (0.5% CMC), 140, 467 or 1400 mg/kg to 5 ICR mice/sex/group for each scheduled sacrifice time (24, 48, and 72 hours after dosing). Positive control was triethylenemelamine and was functional. There was mortality at the high dose (80% of the LD50), especially for males. 6-Benzyladenine treatment did not significantly increase the percentage of polychromatic erythrocytes. No adverse effects.[California Environmental Protection Agency/Department of Pesticide Regulation; SUMMARY OF TOXICOLOGY DATA CYTOKININ and 6-Benzyladenine [Promalin] p. 4 (2002). Available from: as of October 14, 2008: http://www.cdpr.ca.gov/docs/risk/toxsums/pdfs/2082.pdf] **PEER REVIEWED**

Result group:

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/GENOTOXICITY/ The mutagenicity of N6- Benzyladenine was tested in an Ames assay in <i>Salmonella typhimurium</i> test strains TA1535, TA1537, TA1538, TA98, and TA100 (with and without metabolic activation with rat liver microsomal fraction S9) at concentrations ranging from 5 to 5000 ug/plate; in an in vivo mouse micronucleus assay at oral doses of 140, 467 and 1400 mg/kg; and in an unscheduled DNA synthesis assay in rat primary hepatocyte cultures at doses ranging from 1 to 50 ug/mL and did not appear to be mutagenic in any of these test systems.

Result group:

Component Name	Value
NTXV - NON-HUMAN TOXICITY VALUES	LD50 Rabbit Dermal 5 g/kg[USEPA; Reregistration Eligibility Decision (RED) Database for N6 Benzyladenine (1214-39-7). (June 1994). Available from, as of October 17, 2008: http://www.epa.gov/opp00001/reregistration/status_page_n.htm] **PEER REVIEWED**

Result group:

Component Name	Value
NTXV - NON-HUMAN TOXICITY VALUES	LC50 Rabbit inhalation 5.2 mg/L 1 hour.[USEPA; Reregistration Eligibility Decision (RED) Database for N6 Benzyladenine (1214-39-7). (June 1994). Available from, as of October 17, 2008: http://www.epa.gov/opp00001/reregistration/status_page_n.htm] **PEER REVIEWED**

Result group:

Component Name	Value
NTXV - NON-HUMAN TOXICITY VALUES	LD50 Rat Oral 1.3 g/kg[USEPA; Reregistration Eligibility Decision (RED) Database for N6 Benzyladenine (1214-39-7). (June 1994). Available from, as of October 17, 2008: http://www.epa.gov/opp00001/reregistration/status_page_n.htm] **PEER REVIEWED**

Result group:

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50 <i>Colinus virginianus</i> (Northern bobwhite, age 10 days) diet >5620 ppm for 8 days[USEPA, Office of Pesticide Programs; Pesticide Ecotoxicity Database (2000) on N-(Phenylmethyl)-1H-purin-6-amine (1214-39-7). Available from, as of September 29, 2008: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result group:

Component Name	Value
ETXV - ECOTOXICITY VALUES	LD50 <i>Colinus virginianus</i> (Northern bobwhite, age 32 wk) oral 1599 mg/kg (95% confidence interval: 1139-3264 mg/kg)[USEPA, Office of Pesticide Programs; Pesticide Ecotoxicity Database (2000) on N-(Phenylmethyl)-1H-purin-6-amine (1214-39-7). Available from, as of September 29, 2008: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result group:

Component Name	Value
ETXV - ECOTOXICITY VALUES	LD50 <i>Apis mellifera</i> (Honey bee, worker) topical >25 ug/bee for 96 hr[USEPA, Office of Pesticide Programs; Pesticide Ecotoxicity Database (2000) on N-(Phenylmethyl)-1H-purin-6-amine (1214-39-7). Available from, as of September 29, 2008: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result group:

Component Name	Value
ETXV - ECOTOXICITY VALUES	EC50; Species: <i>Daphnia magna</i> (Water flea, age 48 hr); Conditions: freshwater, static; Concentration: 20500 ug/L for 48 hr (95% confidence interval: 15800-26400 ug/L); Effect: intoxication, immobilization /99% purity[USEPA, Office of Pesticide Programs; Pesticide Ecotoxicity Database (2000) on N-(Phenylmethyl)-1H-purin-6-amine (1214-39-7). Available from, as of September 29, 2008: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result group:

Component Name	Value
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Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

ETXV - ECOTOXICITY VALUES

LC50; Species: Oncorhynchus mykiss (Rainbow trout); Conditions: freshwater, static; Concentration: 21400 ug/L for 96 hr (95% confidence interval: 19200-23800 ug/L) /formulated product/[USEPA, Office of Pesticide Programs; Pesticide Ecotoxicity Database (2000) on N-(Phenylmethyl)-1H-purin-6-amine (1214-39-7). Available from, as of September 29, 2008: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result group:

Component Name	Value
METB - METABOLISM/METABOLITES	... The report summarized results of metabolism of labeled compound in rats and dogs. With dogs, the compound (15 mg with label as benzyl-1-C14 - adenine) was fed in a small ball of meat. Urine was collected for 24 and 48 hours. Essentially all of the radioactivity was excreted in urine in 24 hours. By cochromatography, three metabolites were identified as hippuric acid, benzoic acid and benzyladenine (the same as in the rat). With animals given benzyladenine-8-C14, the profile was somewhat different and components were not identified except for parent compound. Excretion of the adenine label was slower. Profiles of rat and dog were, again, similar.[California Environmental Protection Agency/Department of Pesticide Regulation; SUMMARY OF TOXICOLOGY DATA CYTOKININ and 6-Benzyladenine [Promalin] p. 3 (2002). Available from, as of October 14, 2008: http://www.cdpr.ca.gov/docs/risk/toxsums/pdfs/2082.pdf] **PEER REVIEWED**

NLM TOXNET CCRIS URL

Result group:

Component Name	Value
URL	External Link

NLM TOXNET CCRIS Data MSTU - MUTAGENICITY STUDIES

Result group:

Component Name	Value
Dose Range	0.125-1250 MICROMOLAR
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[PAVLICA,M, PAPES,D, FRANEKIC,J AND NAGY,B; EFFECTS OF BENZYLADENINE ON PROKARYOTIC AND EUKARYOTIC CELLS; MUTAT. RES. 281(4):277-282, 1992]
Results	NEGATIVE
Strain/Indicator	V-79/6-THIOGUANINE (HGPRT)
Test System	CHINESE HAMSTER V-79

Result group:

Component Name	Value
Dose Range	1.25-1250 MICROMOLAR
Metabolic Activation	RAT, LIVER, S-9, AROCLOR
Method	STANDARD PLATE
Reference	[PAVLICA,M, PAPES,D, FRANEKIC,J AND NAGY,B; EFFECTS OF BENZYLADENINE ON PROKARYOTIC AND EUKARYOTIC CELLS; MUTAT. RES. 281(4):277-282, 1992]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result group:

Component Name	Value
Dose Range	1.25-1250 MICROMOLAR
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[PAVLICA,M, PAPES,D, FRANEKIC,J AND NAGY,B; EFFECTS OF BENZYLADENINE ON PROKARYOTIC AND EUKARYOTIC CELLS; MUTAT. RES. 281(4):277-282, 1992]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result group:

Component Name	Value
Dose Range	1.25-1250 MICROMOLAR
Metabolic Activation	RAT, LIVER, S-9, AROCLOR
Method	STANDARD PLATE
Reference	[PAVLICA,M, PAPES,D, FRANEKIC,J AND NAGY,B; EFFECTS OF BENZYLADENINE ON PROKARYOTIC AND EUKARYOTIC CELLS; MUTAT. RES. 281(4):277-282, 1992]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result group:

Component Name	Value
Dose Range	1.25-1250 MICROMOLAR
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[PAVLICA,M, PAPES,D, FRANEKIC,J AND NAGY,B; EFFECTS OF BENZYLADENINE ON PROKARYOTIC AND EUKARYOTIC CELLS; MUTAT. RES. 281(4):277-282, 1992]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result group:

Component Name	Value
Dose Range	0.062-1 MG/PLATE (TEST MATERIAL SOLVENT: DEIONIZED WATER)
Metabolic Activation	NONE
Method	STANDARD PLATE

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Reference	[OKSUZOGLU,E DIRIL,N AND DURUSOY,M; MUTAGENIC EFFECTS OF PLANT GROWTH HORMONES WITH THE SALMONELLA/MICROSOME TEST AND THE SOS CHROMOTEST; BULL. ENVIRON. CONTAM. TOXICOL. 65(6):691-698, 2000]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result group:

Component Name	Value
Dose Range	0.062-1 MG/PLATE (TEST MATERIAL SOLVENT: DEIONIZED WATER)
Metabolic Activation	RAT LIVER S-9, 3-METHYLCHOLANTHRENE AND PHENOBARBITAL
Method	STANDARD PLATE
Reference	[OKSUZOGLU,E DIRIL,N AND DURUSOY,M; MUTAGENIC EFFECTS OF PLANT GROWTH HORMONES WITH THE SALMONELLA/MICROSOME TEST AND THE SOS CHROMOTEST; BULL. ENVIRON. CONTAM. TOXICOL. 65(6):691-698, 2000]

Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result group:

Component Name	Value
Dose Range	0.062-1 MG/PLATE (TEST MATERIAL SOLVENT: DEIONIZED WATER)
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[OKSUZOGLU,E DIRIL,N AND DURUSOY,M; MUTAGENIC EFFECTS OF PLANT GROWTH HORMONES WITH THE SALMONELLA/MICROSOME TEST AND THE SOS CHROMOTEST; BULL. ENVIRON. CONTAM. TOXICOL. 65(6):691-698, 2000]

Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result group:

Component Name	Value
Dose Range	0.062-1 MG/PLATE (TEST MATERIAL SOLVENT: DEIONIZED WATER)
Metabolic Activation	RAT LIVER S-9, 3-METHYLCHOLANTHRENE AND PHENOBARBITAL
Method	STANDARD PLATE
Reference	[OKSUZOGLU,E DIRIL,N AND DURUSOY,M; MUTAGENIC EFFECTS OF PLANT GROWTH HORMONES WITH THE SALMONELLA/MICROSOME TEST AND THE SOS CHROMOTEST; BULL. ENVIRON. CONTAM. TOXICOL. 65(6):691-698, 2000]

Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

NLM TOXNET Toxicology

Result group:

Component Name	Value
Effect	SENSE ORGANS AND SPECIAL SENSES: LACRIMATION: EYE BEHAVIORAL: SOMNOLENCE (GENERAL DEPRESSED ACTIVITY)
Organism	mouse
PubMed ID	0
Reference	Toho Igakkai Zasshi. Journal of Medical Society of Toho University. Vol. 19, Pg. 336, 1972.
Reported Dose	1300mg/kg (1300mg/kg)
Test type	LD50

Result group:

Component Name	Value
Organism	mouse
PubMed ID	0
Reference	Toho Igakkai Zasshi. Journal of Medical Society of Toho University. Vol. 19, Pg. 336, 1972.
Reported Dose	> 5gm/kg (5000mg/kg)
Test type	LD50

Result group:

Component Name	Value
Organism	mouse
PubMed ID	0
Reference	Toho Igakkai Zasshi. Journal of Medical Society of Toho University. Vol. 19, Pg. 336, 1972.
Reported Dose	> 2300mg/kg (2300mg/kg)
Test type	LD50

Result group:

Component Name	Value
Effect	SENSE ORGANS AND SPECIAL SENSES: LACRIMATION: EYE BEHAVIORAL: SOMNOLENCE (GENERAL DEPRESSED ACTIVITY)
Organism	rat
PubMed ID	0
Reference	Toho Igakkai Zasshi. Journal of Medical Society of Toho University. Vol. 19, Pg. 336, 1972.
Reported Dose	2125mg/kg (2125mg/kg)
Test type	LD50

Chronic Toxicity

NLM TOXNET HSDB URL

Result group:

Component Name	Value
HSDB URL	External Link

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Carcinogenicity

NLM TOXNET HSDB URL

Result group:

Component Name	Value
HSDB URL	External Link

NLM TOXNET CCRIS URL

Result group:

Component Name	Value
URL	External Link

Genotoxicity

NLM TOXNET CCRIS Data MSTU - MUTAGENICITY STUDIES

Result group:

Component Name	Value
Dose Range	0.125-1250 MICROMOLAR
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[PAVLICA,M, PAPES,D, FRANEKIC,J AND NAGY,B; EFFECTS OF BENZYLADENINE ON PROKARYOTIC AND EUKARYOTIC CELLS; MUTAT. RES. 281(4):277-282, 1992]
Results	NEGATIVE
Strain/Indicator	V-79/6-THIOGUANINE (HGPRT)
Test System	CHINESE HAMSTER V-79

Result group:

Component Name	Value
Dose Range	1.25-1250 MICROMOLAR
Metabolic Activation	RAT, LIVER, S-9, AROCLOR
Method	STANDARD PLATE
Reference	[PAVLICA,M, PAPES,D, FRANEKIC,J AND NAGY,B; EFFECTS OF BENZYLADENINE ON PROKARYOTIC AND EUKARYOTIC CELLS; MUTAT. RES. 281(4):277-282, 1992]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result group:

Component Name	Value
Dose Range	1.25-1250 MICROMOLAR
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[PAVLICA,M, PAPES,D, FRANEKIC,J AND NAGY,B; EFFECTS OF BENZYLADENINE ON PROKARYOTIC AND EUKARYOTIC CELLS; MUTAT. RES. 281(4):277-282, 1992]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result group:

Component Name	Value
Dose Range	1.25-1250 MICROMOLAR
Metabolic Activation	RAT, LIVER, S-9, AROCLOR
Method	STANDARD PLATE
Reference	[PAVLICA,M, PAPES,D, FRANEKIC,J AND NAGY,B; EFFECTS OF BENZYLADENINE ON PROKARYOTIC AND EUKARYOTIC CELLS; MUTAT. RES. 281(4):277-282, 1992]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result group:

Component Name	Value
Dose Range	1.25-1250 MICROMOLAR
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[PAVLICA,M, PAPES,D, FRANEKIC,J AND NAGY,B; EFFECTS OF BENZYLADENINE ON PROKARYOTIC AND EUKARYOTIC CELLS; MUTAT. RES. 281(4):277-282, 1992]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result group:

Component Name	Value
Dose Range	0.062-1 MG/PLATE (TEST MATERIAL SOLVENT: DEIONIZED WATER)
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[OKSUZOGLU,E DIRIL,N AND DURUSOY,M; MUTAGENIC EFFECTS OF PLANT GROWTH HORMONES WITH THE SALMONELLA/MICROSOME TEST AND THE SOS CHROMOTEST; BULL. ENVIRON. CONTAM. TOXICOL. 65(6):691-698, 2000]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result group:

Component Name	Value
Dose Range	0.062-1 MG/PLATE (TEST MATERIAL SOLVENT: DEIONIZED WATER)
Metabolic Activation	RAT LIVER S-9, 3-METHYLCHOLANTHRENE AND PHENOBARBITAL
Method	STANDARD PLATE

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Reference	[OKSUZOGLU,E DIRIL,N AND DURUSOY,M; MUTAGENIC EFFECTS OF PLANT GROWTH HORMONES WITH THE SALMONELLA/MICROSOME TEST AND THE SOS CHROMOTEST; BULL. ENVIRON. CONTAM. TOXICOL. 65(6):691-698, 2000]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result group:

Component Name	Value
Dose Range	0.062-1 MG/PLATE (TEST MATERIAL SOLVENT: DEIONIZED WATER)
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[OKSUZOGLU,E DIRIL,N AND DURUSOY,M; MUTAGENIC EFFECTS OF PLANT GROWTH HORMONES WITH THE SALMONELLA/MICROSOME TEST AND THE SOS CHROMOTEST; BULL. ENVIRON. CONTAM. TOXICOL. 65(6):691-698, 2000]

Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result group:

Component Name	Value
Dose Range	0.062-1 MG/PLATE (TEST MATERIAL SOLVENT: DEIONIZED WATER)
Metabolic Activation	RAT LIVER S-9, 3-METHYLCHOLANTHRENE AND PHENOBARBITAL
Method	STANDARD PLATE
Reference	[OKSUZOGLU,E DIRIL,N AND DURUSOY,M; MUTAGENIC EFFECTS OF PLANT GROWTH HORMONES WITH THE SALMONELLA/MICROSOME TEST AND THE SOS CHROMOTEST; BULL. ENVIRON. CONTAM. TOXICOL. 65(6):691-698, 2000]

Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Developmental Toxicity

NLM TOXNET HSDB URL

Result group:

Component Name	Value
HSDB URL	External Link

Reproductive Toxicity

NLM TOXNET HSDB URL

Result group:

Component Name	Value
HSDB URL	External Link

Occurrence

EPA Pesticide Reregistration eligibility documents

Result group:

Component Name	Value
Fact Sheet URL	External Link
RED URL	External Link

Non-regulatory Risk Management

US Army Military exposure guidelines (MEGs) for Short-Term exposures to chemicals in ambient air

Result group:

Component Name	Value
1 hour Critical Air MEG	5.0E+02
1 hour Marginal Air MEG	1.0E+02
1 hr Negligible air MEG	1.5E+01

EPA Biopesticide Fact Sheets URL

Result group:

Component Name	Value
EPA Pesticide Fact Sheet (PFS) Biopesticide URL	External Link
EPA Pesticide Reregistration Eligibility Decision (RED) Factsheet URL	External Link

FDA Pesttrak Files - CFSAN pesticide data

Result group:

Component Name	Value
Metabolite Status	parent
Use	plant growth regulator

National Center for Food and Agricultural Policy (NCFAP) National Pesticide Use Database for 1992

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	CONNECTICUT

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	IDAHO

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	WASHINGTON

Result group:

Component Name	Value
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Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Crop APPLES
Pesticide type OTHER PESTICIDES
State MICHIGAN

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	PENNSYLVANIA

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	MAINE

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	NEW HAMPSHIRE

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	NEW YORK

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	OHIO

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	OREGON

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	VIRGINIA

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	WEST VIRGINIA

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	INDIANA

NOAA Pesticide Data URL

Result group:

Component Name	Value
Pesticide Data URL	External Link

Scorecard Health Effects Summaries

Result group:

Component Name	Value
Health Impact Type	Suspected Neurotoxicant
References	RTECS

Result group:

Component Name	Value
Health Impact Type	Suspected Skin Or Sense Organ Toxicant
References	RTECS

Regulatory Risk Management

Australian government APVMA approved active substances

Result group:

Component Name	Value
Approval Holder	Valent Biosciences A Div Of Sumitomo Chemical Australia
Approval No.	44449
Manufacturing Site	Abbott Laboratories Chemical ; Agricultural Products Div. 1401 Sheridan Road North Chicago Il 60064 Usa

Result group:

Component Name	Value
Approval Holder	Bloomfresh Pty Ltd
Approval No.	44598
Manufacturing Site	Krishi Rasayan (bihar) Shed 2a Large Industrial Estate Rk Ashram, Muzzaffarpur, Bihar India

Result group:

Component Name	Value
Approval Holder	Valent Biosciences A Div Of Sumitomo Chemical Australia
Approval No.	51841

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Manufacturing Site

Zhejiang Shenghua Biok Biology Co. Ltd No.1 Zhongguan Industrial Park
Deqing, Zhejiang Province 313220 Pr China

Result group:

Component Name	Value
Approval Holder	Valent Biosciences A Div Of Sumitomo Chemical Australia
Approval No.	51842
Manufacturing Site	Borregaard Synthesis Inc 9 Opportunity Way Newburyport, Massachusetts 10950 Usa

Result group:

Component Name	Value
Approval Holder	Farmoz Pty Limited
Approval No.	53351
Manufacturing Site	Shanghai No. 18 Pharmaceutical Factory No. 804 Bao San Road Shanghai 200081 Pr China

Result group:

Component Name	Value
Approval Holder	Valent Biosciences A Div Of Sumitomo Chemical Australia
Approval No.	61044
Manufacturing Site	Valent Biosciences Corporation Sichuan Guoguang Agrochemical Co Ltd 28 Dongfeng Rd Jian Yang City Sichuan 641400 China

Result group:

Component Name	Value
Approval Holder	Fine Agrochemicals Limited
Approval No.	62241
Manufacturing Site	Taizhou Dapeng Pharmaceutical Industry Co Ltd Yanhui Industrial Zone Linhai City Zhejiang Province 317016 China

ECHA Pre-Registered Substances

Result group:

Component Name	Value
Date of Registration	11/30/2010

Canada Domestic Substance List (2007)

Result group:

Component Name	Value
Bioaccumulative	No
Inherently Toxic to Aquatic Organisms	No
Meets CEPA Categorization Criteria	No
Meets Environmental Criteria for Categorization	No
Meets Human Health Criteria	No
Persistent	No
Substance category	Organics

EPA Pesticide Reregistration Status

Result group:

Component Name	Value
Case Number	case 2040
Status	RED (Reregistration Eligibility Decisions) signed (06/1994)
Type	plant growth regulator

EPA Pesticide Reregistration eligibility documents

Result group:

Component Name	Value
Fact Sheet URL	External Link
RED URL	External Link

EPA Inert Ingredients

Result group:

Component Name	Value
Relevant FR citation	40 CFR Part 180

EPA Registration Review: Schedule for Beginning Reviews - 2011 to 2014 (Biochemicals)

Result group:

Component Name	Value
Baseline Date	06/01/94
First Registered	03/05/85
Fiscal Year Schedule	2011
PC Code	116901
RED Status	Completed
RED Status Date	06/01/94
Registration Review Case Name	Benzyladenine

EPA OPPIN Active Pesticides Information (related to registration)

Result group:

Component Name	Value
Classification	BIOCHEMICAL
First Registered	11-May-84
PC Code	PCCCODE_116901
Pesticide Category	PLANT GROWTH REGULATOR
Registration Review Case Number	2040

EPA OPPIN Food Use Tolerances

Result group:

Component Name	Value
CFR Citation	180.115
Commodity	APPLE
Current Status	Exempted (02-Apr-2004)
PC Code	PCCCODE 116901
Tolerance Type	Permanent Tolerance

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Result group:

Component Name	Value
CFR Citation	180.115
Commodity	PISTACHIO
Current Status	Exempted (02-Apr-2004)
PC Code	PCCCODE 116901
Tolerance Type	Permanent Tolerance

European Union (EU) Pesticides Database

Result group:

Component Name	Value
ADI	0,01mg/kg bw/day
ADI Source/Year	11/1/EU
Annex I 91/414	Approved
AOEL	0,03mg/kg bw/day
AOEL Source/Year	11/1/EU
ARfD	Not appl.
ARfD Source/Year	11/1/EU
Assess Risk	EFSA = European Food Safety Authority
Authorisation in progress	AT, CZ
Authorised	BE, DK, EL, ES, FR, IT, NL, PT, RO, SI
Category	PG = Plant growth regulator
Expiry Date	31/05/2021
Inclusion Date	40549
Legislation	2011/1/EUReg. (EU) No 540/2011
List	A (Existing active substances divided into four lists for phased evaluations)A4
Remarks	Initially non included by Decision 2008/941. Included as from 1 June 2011 following re-submission for inclusion according to Reg. 33/2008
RMS	FR

Title 40 US CFR part 185 citation for FDA pesticides of interest

Result group:

Component Name	Value
40 CFR 180	revoked
Other Status	foreign use?

MESH Annotations

Result group:

Component Name	Value
Pharmacological Action	Plant Growth Regulators

MESH URLs

Result group:

Component Name	Value
MESH URL	External Link

SRS -- EPA Substance Regulatory Services List

Result group:

Component Name	Value
NTP Chemical Repository -- National Toxicology Program Chemical Health and Safety Data	Subject to specified regulation

NLM TOXNET Toxicology

Result group:

Component Name	Value
Effect	SENSE ORGANS AND SPECIAL SENSES: LACRIMATION: EYE BEHAVIORAL: SOMNOLENCE (GENERAL DEPRESSED ACTIVITY)
Organism	mouse
PubMed ID	0
Reference	Toho Igakkai Zasshi. Journal of Medical Society of Toho University. Vol. 19, Pg. 336, 1972.
Reported Dose	1300mg/kg (1300mg/kg)
Test type	LD50

Result group:

Component Name	Value
Organism	mouse
PubMed ID	0
Reference	Toho Igakkai Zasshi. Journal of Medical Society of Toho University. Vol. 19, Pg. 336, 1972.
Reported Dose	> 5gm/kg (5000mg/kg)
Test type	LD50

Result group:

Component Name	Value
Organism	mouse
PubMed ID	0
Reference	Toho Igakkai Zasshi. Journal of Medical Society of Toho University. Vol. 19, Pg. 336, 1972.
Reported Dose	> 2300mg/kg (2300mg/kg)
Test type	LD50

Result group:

Component Name	Value
Effect	SENSE ORGANS AND SPECIAL SENSES: LACRIMATION: EYE BEHAVIORAL: SOMNOLENCE (GENERAL DEPRESSED ACTIVITY)
Organism	rat
PubMed ID	0
Reference	Toho Igakkai Zasshi. Journal of Medical Society of Toho University. Vol. 19, Pg. 336, 1972.

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Reported Dose 2125mg/kg (2125mg/kg)
Test type LD50

Production and Release

Australian government APVMA approved active substances

Result group:

Component Name	Value
Approval Holder	Valent Biosciences A Div Of Sumitomo Chemical Australia
Approval No.	44449
Manufacturing Site	Abbott Laboratories Chemical ; Agricultural Products Div. 1401 Sheridan Road North Chicago Il 60064 Usa

Result group:

Component Name	Value
Approval Holder	Bloomfresh Pty Ltd
Approval No.	44598
Manufacturing Site	Krishi Rasayan (bihar) Shed 2a Large Industrial Estate Rk Ashram, Muzzaffarpur, Bihar India

Result group:

Component Name	Value
Approval Holder	Valent Biosciences A Div Of Sumitomo Chemical Australia
Approval No.	51841
Manufacturing Site	Zhejiang Shenghua Biok Biology Co. Ltd No.1 Zhongguan Industrial Park Deqing, Zhejiang Province 313220 Pr China

Result group:

Component Name	Value
Approval Holder	Valent Biosciences A Div Of Sumitomo Chemical Australia
Approval No.	51842
Manufacturing Site	Borregaard Synthesis Inc 9 Opportunity Way Newburyport, Massachusetts 10950 Usa

Result group:

Component Name	Value
Approval Holder	Farmoz Pty Limited
Approval No.	53351
Manufacturing Site	Shanghai No. 18 Pharmaceutical Factory No. 804 Bao San Road Shanghai 200081 Pr China

Result group:

Component Name	Value
Approval Holder	Valent Biosciences A Div Of Sumitomo Chemical Australia
Approval No.	61044
Manufacturing Site	Valent Biosciences Corporation Sichuan Guoguang Agrochemical Co Ltd 28 Dongfeng Rd Jian Yang City Sichuan 641400 China

Result group:

Component Name	Value
Approval Holder	Fine Agrochemicals Limited
Approval No.	62241
Manufacturing Site	Taizhou Dapeng Pharmaceutical Industry Co Ltd Yanhui Industrial Zone Linhai City Zhejiang Province 317016 China

ECHA Pre-Registered Substances

Result group:

Component Name	Value
Date of Registration	11/30/2010

Canada Domestic Substance List (2007)

Result group:

Component Name	Value
Bioaccumulative	No
Inherently Toxic to Aquatic Organisms	No
Meets CEPA Categorization Criteria	No
Meets Environmental Criteria for Categorization	No
Meets Human Health Criteria	No
Persistent	No
Substance category	Organics

EPA Biopesticide Fact Sheets URL

Result group:

Component Name	Value
EPA Pesticide Fact Sheet (PFS) Biopesticide URL	External Link
EPA Pesticide Reregistration Eligibility Decision (RED) Factsheet URL	External Link

EPA Pesticide Reregistration Status

Result group:

Component Name	Value
Case Number	case 2040
Status	RED (Reregistration Eligibility Decisions) signed (06/1994)
Type	plant growth regulator

EPA Pesticide Reregistration eligibility documents

Result group:

Component Name	Value
Fact Sheet URL	External Link
RED URL	External Link

EPA Inert Ingredients

Result group:

Component Name	Value
Relevant FR citation	40 CFR Part 180

EPA Registration Review: Schedule for Beginning Reviews - 2011 to 2014 (Biochemicals)

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Result group:

Component Name	Value
Baseline Date	06/01/94
First Registered	03/05/85
Fiscal Year Schedule	2011
PC Code	116901
RED Status	Completed
RED Status Date	06/01/94
Registration Review Case Name	Benzyladenine

EPA OPPIN Active Pesticides Information (related to registration)

Result group:

Component Name	Value
Classification	BIOCHEMICAL
First Registered	11-May-84
PC Code	PCCCODE_116901
Pesticide Category	PLANT GROWTH REGULATOR
Registration Review Case Number	2040

EPA OPPIN Food Use Tolerances

Result group:

Component Name	Value
CFR Citation	180.115
Commodity	APPLE
Current Status	Exempted (02-Apr-2004)
PC Code	PCCCODE 116901
Tolerance Type	Permanent Tolerance

Result group:

Component Name	Value
CFR Citation	180.115
Commodity	PISTACHIO
Current Status	Exempted (02-Apr-2004)
PC Code	PCCCODE 116901
Tolerance Type	Permanent Tolerance

European Union (EU) Pesticides Database

Result group:

Component Name	Value
ADI	0,01mg/kg bw/day
ADI Source/Year	11/1/EU
Annex I 91/414	Approved
AOEL	0,03mg/kg bw/day
AOEL Source/Year	11/1/EU
ARfD	Not appl.
ARfD Source/Year	11/1/EU
Assess Risk	EFSA = European Food Safety Authority
Authorisation in progress	AT, CZ
Authorised	BE, DK, EL, ES, FR, IT, NL, PT, RO, SI
Category	PG = Plant growth regulator
Expiry Date	31/05/2021
Inclusion Date	40549
Legislation	2011/1/EUReg. (EU) No 540/2011
List	A (Existing active substances divided into four lists for phased evaluations)A4
Remarks	Initially non included by Decision 2008/941. Included as from 1 June 2011 following re-submission for inclusion according to Reg. 33/2008
RMS	FR

Title 40 US CFR part 185 citation for FDA pesticides of interest

Result group:

Component Name	Value
40 CFR 180	revoked
Other Status	foreign use?

MESH Annotations

Result group:

Component Name	Value
Pharmacological Action	Plant Growth Regulators

MESH URLs

Result group:

Component Name	Value
MESH URL	External Link

SRS -- EPA Substance Regulatory Services List

Result group:

Component Name	Value
NTP Chemical Repository -- National Toxicology Program Chemical Health and Safety Data	Subject to specified regulation

NLM TOXNET Toxicology

Result group:

Component Name	Value
Effect	SENSE ORGANS AND SPECIAL SENSES: LACRIMATION: EYE BEHAVIORAL: SOMNOLENCE (GENERAL DEPRESSED ACTIVITY)
Organism	mouse
PubMed ID	0

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Reference	Toho Igakkai Zasshi. Journal of Medical Society of Toho University. Vol. 19, Pg. 336, 1972.
Reported Dose	1300mg/kg (1300mg/kg)
Test type	LD50

Result group:

Component Name	Value
Organism	mouse
PubMed ID	0
Reference	Toho Igakkai Zasshi. Journal of Medical Society of Toho University. Vol. 19, Pg. 336, 1972.
Reported Dose	> 5gm/kg (5000mg/kg)
Test type	LD50

Result group:

Component Name	Value
Organism	mouse
PubMed ID	0
Reference	Toho Igakkai Zasshi. Journal of Medical Society of Toho University. Vol. 19, Pg. 336, 1972.
Reported Dose	> 2300mg/kg (2300mg/kg)
Test type	LD50

Result group:

Component Name	Value
Effect	SENSE ORGANS AND SPECIAL SENSES: LACRIMATION: EYE BEHAVIORAL: SOMNOLENCE (GENERAL DEPRESSED ACTIVITY)
Organism	rat
PubMed ID	0
Reference	Toho Igakkai Zasshi. Journal of Medical Society of Toho University. Vol. 19, Pg. 336, 1972.
Reported Dose	2125mg/kg (2125mg/kg)
Test type	LD50

USDA Agricultural Chemical Usage - Field Crops (2007)

Result group:

Component Name	Value
Applications (apples)	1.3
Area applied (apples) (%)	23
Pesticide type	Other Chemicals
Rate per application (apples)	0.034
Rate per crop year (apples)	0.043
Total applied (apples)	2.9

USDA Agricultural Chemical Usage - Field Crops (2003)

Result group:

Component Name	Value
Applications (Fall potatoes)	1.4
Applications (Upland cotton)	1.1
Area applied (Fall potatoes) (%)	*
Area applied (Upland cotton) (%)	*
Pesticide type	Other Chemicals
Rate per application (Fall potatoes)	(3/)
Rate per application (Upland cotton)	(4/)
Rate per crop year (Fall potatoes)	(3/)
Rate per crop year (Upland cotton)	(4/)
Total applied (Fall potatoes)	(2/)
Total applied (Upland cotton)	(2/)

USDA Agricultural Chemical Usage - Fruit Crops (2005)

Result group:

Component Name	Value
Area applied (Apples) (%)	19
Pesticide type	Other Chemicals
Rate per application (Apples)	0.041
Rate per crop year (Apples)	0.046
Total applied (Apples)	2.7

USDA Agricultural Chemical Usage - Fruit Crops (2003)

Result group:

Component Name	Value
Area applied (Apples) (%)	18
Pesticide type	Other Chemicals
Rate per application (Apples)	0.03
Rate per crop year (Apples)	0.03
Total applied (Apples)	1.8

USDA Agricultural Chemical Usage - Fruit Crops (2001)

Result group:

Component Name	Value
Area applied (Apples) (%)	20
Pesticide type	Other Chemicals
Total applied (Apples)	2.2999999999999998

USDA Agricultural Chemical Usage - Fruit Crops (1999)

Result group:

Component Name	Value
Area applied (Apples) (%)	3
Pesticide type	Other Chemicals

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Total applied (Apples)

0.6

USDA Agricultural Chemical Usage - Fruit Crops (1997)

Result group:

Component Name	Value
Area applied (Apples) (%)	2
Pesticide type	Other Chemicals

USDA NASS Agricultural Chemical Use Survey for Nursery and Floriculture Crops, 2009

Result group:

Component Name	Value
Amount	(Z)
Chemical Class	CHEMICAL, OTHER
Crop	NURSERY ; FLORICULTURE TOTALS
EPA PC-Code	116901
State	MULTI-STATE

Result group:

Component Name	Value
Amount	(Z)
Chemical Class	CHEMICAL, OTHER
Crop	NURSERY TOTALS
EPA PC-Code	116901
State	MULTI-STATE

Result group:

Component Name	Value
Amount	(D)
Chemical Class	CHEMICAL, OTHER
Crop	PROPAGATIVE MATERIAL, NURSERY
EPA PC-Code	116901
State	MULTI-STATE

Result group:

Component Name	Value
Amount	(D)
Chemical Class	CHEMICAL, OTHER
Crop	TRANSPLANTS, COMMERCIAL, VEGETABLE ; STRAWBERRY
EPA PC-Code	116901
State	MULTI-STATE

Result group:

Component Name	Value
Amount	(D)
Chemical Class	CHEMICAL, OTHER
Crop	WOODY ORNAMENTALS ; VINES, OTHER
EPA PC-Code	116901
State	MULTI-STATE

Result group:

Component Name	Value
Amount	(Z)
Chemical Class	CHEMICAL, OTHER
Crop	FLORICULTURE TOTALS
EPA PC-Code	116901
State	MULTI-STATE

Result group:

Component Name	Value
Amount	(Z)
Chemical Class	CHEMICAL, OTHER
Crop	BEDDING PLANTS, ANNUAL
EPA PC-Code	116901
State	MULTI-STATE

Result group:

Component Name	Value
Amount	(Z)
Chemical Class	CHEMICAL, OTHER
Crop	BEDDING PLANTS, HERBACEOUS PERENNIAL
EPA PC-Code	116901
State	MULTI-STATE

Result group:

Component Name	Value
Amount	(D)
Chemical Class	CHEMICAL, OTHER
Crop	CUT FLOWERS
EPA PC-Code	116901
State	MULTI-STATE

Result group:

Component Name	Value
Amount	(Z)
Chemical Class	CHEMICAL, OTHER
Crop	FLOWERING PLANTS, POTTED, INDOOR
EPA PC-Code	116901
State	MULTI-STATE

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Result group:

Component Name	Value
Amount	(D)
Chemical Class	CHEMICAL, OTHER
Crop	FOLIAGE PLANTS, INDOOR
EPA PC-Code	116901
State	MULTI-STATE

Result group:

Component Name	Value
Amount	(Z)
Chemical Class	CHEMICAL, OTHER
Crop	PROPAGATIVE MATERIAL, FLORICULTURE
EPA PC-Code	116901
State	MULTI-STATE

USDA NASS Agricultural Chemical Use Survey for Fruit Crops, 2009

Result group:

Component Name	Value
Applications	(D)
Crop	APPLES
EPA PC Code	116901
Percent coverate	(D)
Pesticide type	CHEMICAL, OTHER
Rate per application	(D)
Rate per crop year	(D)
State	CALIFORNIA
Total applied	(D)

Result group:

Component Name	Value
Applications	1.1000000000000001
Crop	APPLES
EPA PC Code	116901
Percent coverate	11
Pesticide type	CHEMICAL, OTHER
Rate per application	0.059
Rate per crop year	0.062
State	MICHIGAN
Total applied	300

Result group:

Component Name	Value
Applications	2.4
Crop	APPLES
EPA PC Code	116901
Percent coverate	12
Pesticide type	CHEMICAL, OTHER
Rate per application	0.029
Rate per crop year	0.069
State	NORTH CAROLINA
Total applied	100

Result group:

Component Name	Value
Applications	1.2
Crop	APPLES
EPA PC Code	116901
Percent coverate	21
Pesticide type	CHEMICAL, OTHER
Rate per application	0.032
Rate per crop year	0.038
State	OREGON
Total applied	(Z)

Result group:

Component Name	Value
Applications	1.2
Crop	APPLES
EPA PC Code	116901
Percent coverate	16
Pesticide type	CHEMICAL, OTHER
Rate per application	0.039
Rate per crop year	0.046
State	PENNSYLVANIA
Total applied	200

Result group:

Component Name	Value
Applications	1.4
Crop	PEARS
EPA PC Code	116901
Percent coverate	3
Pesticide type	CHEMICAL, OTHER

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Rate per application	0.076
Rate per crop year	0.104
State	OREGON
Total applied	100

In Vitro

DSSTox ArrayExpress DSSTox Annotation

Result group:

Component Name	Value
Chemical StudyType	Treatment
Experiment Accession	E-MEXP-749;E-MEXP-1573;E-MEXP-689;E-GEOD-1766
Experiment URL	External Link
Study Type	microarray

DSSTox GEO DSSTox Annotation

Result group:

Component Name	Value
Chemical StudyType	Treatment
Experiment Accession	GSE1766
Experiment URL	External Link
Study Type	microarray

MDR-1

Result group:

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

ChEMBL activity data

Result group:

Component Name	Value
Activity Type	IC50
Assay Source	Scientific Literature
Assay Type	Binding
Curation	Expert
Description	Inhibitory activity (IC50) against human phosphatidylinositol 4-kinase at the ATP binding site
Operator	=
Organism	Homo sapiens
Reference	J. Med. Chem. (1990) 8:2073-2080
Target	PI4-kinase type II beta
Target Mapping	Homologous protein
Units	nM

Result group:

Component Name	Value
Activity Type	Ki
Assay Source	Scientific Literature
Assay Type	Binding
Curation	Expert
Description	Binding affinity (Ki) against human phosphatidylinositol 4-kinase
Operator	=
Organism	Homo sapiens
Reference	J. Med. Chem. (1990) 8:2073-2080
Target	PI4-kinase type II beta
Target Mapping	Homologous protein
Units	nM

Result group:

Component Name	Value
Activity Type	Vmax
Assay Source	Scientific Literature
Assay Type	ADMET
Curation	Autocuration
Description	Vmax value was determined
Operator	=
Reference	J. Med. Chem. (1990) 8:2073-2080
Target Mapping	Unassigned
Units	c.p.m.

Result group:

Component Name	Value
Activity Type	Km
Assay Source	Scientific Literature
Assay Type	Binding
Curation	Expert
Description	Inhibition of Phosphatidylinositol 4-kinase at the ATP binding site
Operator	=
Organism	Homo sapiens
Reference	J. Med. Chem. (1990) 8:2073-2080
Target	PI4-kinase type II beta
Target Mapping	Multiple proteins
Units	nM

Result group:

Component Name	Value
Activity Type	IC50

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Assay Source	Scientific Literature
Assay Type	Binding
Curation	Expert
Description	Inhibitory activity against purified cdc2 p34/Cyclin B obtained from M phase oocytes of the starfish <i>Marthasterias glacialis</i> .
Operator	=
Organism	Homo sapiens
Reference	J. Med. Chem. (1997) 4:408-412
Target	Cyclin-dependent kinase 1
Target Mapping	Homologous protein
Units	nM

Result group:

Component Name	Value
Activity Type	IC50
Assay Source	Scientific Literature
Assay Type	Functional
Cell Line	HL-60
Curation	Autocuration
Description	Antiproliferative activity against human HL60 cells
Operator	>
Organism	Homo sapiens
Reference	Bioorg. Med. Chem. Lett. (2007) 7:1934-1937
Target	HL-60 (Promyeloblast leukemia cells)
Target Mapping	Non-molecular
Units	nM

Result group:

Component Name	Value
Activity Type	Kcat/Km
Assay Source	Scientific Literature
Assay Type	Binding
Curation	Autocuration
Description	Ratio Kcat to Km for Zea mays CKX1 receptor
Operator	=
Organism	Zea mays
Reference	Bioorg. Med. Chem. (2009) 5:1938-1947
Target	Cytokinin dehydrogenase 1
Target Mapping	Protein

Result group:

Component Name	Value
Activity Type	Km
Assay Source	Scientific Literature
Assay Type	Binding
Curation	Autocuration
Description	Activity at Zea mays CKX1 expressed in Pichinia pastonis assessed as aldehyde production by 4-aminophenol assay
Operator	=
Organism	Zea mays
Reference	Bioorg. Med. Chem. (2009) 5:1938-1947
Target	Cytokinin dehydrogenase 1
Target Mapping	Protein
Units	nM

Result group:

Component Name	Value
Activity Type	Kcat
Assay Source	Scientific Literature
Assay Type	Binding
Curation	Autocuration
Description	Activity at Zea mays CKX1 expressed in Pichinia pastonis assessed as aldehyde production by 4-aminophenol assay
Operator	=
Organism	Zea mays
Reference	Bioorg. Med. Chem. (2009) 5:1938-1947
Target	Cytokinin dehydrogenase 1
Target Mapping	Protein
Units	s-1

Result group:

Component Name	Value
Activity Type	Activity
Assay Source	Scientific Literature
Assay Type	Binding
Curation	Autocuration
Description	Binding affinity to <i>Candida albicans</i> CaCdr1p expressed in yeast AD1-8u
Reference	Eur. J. Med. Chem. (2010) 11:4813-4826
Target Mapping	Unassigned

Result group:

Component Name	Value
Activity Type	Activity
Assay Source	Scientific Literature

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Assay Type	Binding
Curation	Autocuration
Description	Binding affinity to Candida albicans CaMdr1p expressed in yeast AD1-8u
Reference	Eur. J. Med. Chem. (2010) 11:4813-4826
Target Mapping	Unassigned

Result group:

Component Name	Value
Activity Type	IZ
Assay Source	Scientific Literature
Assay Type	Functional
Curation	Autocuration
Description	Antifungal activity against yeast AD1-8u expressing Candida albicans CaCdr1p by agar disk diffusion assay
Operator	=
Organism	Saccharomyces cerevisiae
Reference	Eur. J. Med. Chem. (2010) 11:4813-4826
Target	Saccharomyces cerevisiae
Target Mapping	Non-molecular
Units	cm

Result group:

Component Name	Value
Activity Type	IZ
Assay Source	Scientific Literature
Assay Type	Functional
Curation	Autocuration
Description	Antifungal activity against yeast AD1-8u expressing Candida albicans CaMdr1p by agar disk diffusion assay
Operator	=
Organism	Saccharomyces cerevisiae
Reference	Eur. J. Med. Chem. (2010) 11:4813-4826
Target	Saccharomyces cerevisiae
Target Mapping	Non-molecular
Units	cm

Result group:

Component Name	Value
Activity Type	Potency
Assay Source	PubChem BioAssays
Assay Type	Functional
Curation	Autocuration
Description	PubChem BioAssay. qHTS Assay for Modulators of Lamin A Splicing. (Class of assay: confirmatory)
Operator	=
Organism	Homo sapiens
Reference	PubChem BioAssay data set () :-
Target	Prelamin-A/C
Target Mapping	Protein
Units	nM

Result group:

Component Name	Value
Activity Type	Potency
Assay Source	PubChem BioAssays
Assay Type	Functional
Curation	Autocuration
Description	PubChem BioAssay. qHTS Assay for Agonists of the Thyroid Stimulating Hormone Receptor. (Class of assay: confirmatory)
Operator	=
Organism	Homo sapiens
Reference	PubChem BioAssay data set () :-
Target	Thyroid stimulating hormone receptor
Target Mapping	Protein
Units	nM

Result group:

Component Name	Value
Activity Type	Potency
Assay Source	PubChem BioAssays
Assay Type	Functional
Curation	Autocuration
Description	PubChem BioAssay. qHTS Assay for Lipid Storage Modulators in Drosophila S3 Cells. (Class of assay: confirmatory)
Operator	=
Reference	PubChem BioAssay data set () :-
Target Mapping	Unassigned
Units	nM

Result group:

Component Name	Value
Activity Type	Potency
Assay Source	PubChem BioAssays
Assay Type	Binding
Curation	Autocuration

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Description	PubChem BioAssay. qHTS Assay for Identification of Novel General Anesthetics. In this assay, a GABAergic mimetic model system, apoferritin and a profluorescent 1-aminanthracene ligand (1-AMA), was used to construct a competitive binding assay for identification of novel general anesthetics (Class of assay: confirmatory) [Related pubchem assays: 2385 (Probe Development Summary for Identification of Novel General Anesthetics), 2323 (Validation apoferritin assay run on SigmaAldrich LOPAC1280 collection)]
Operator	=
Organism	Equus caballus
Reference	PubChem BioAssay data set () :-
Target	Ferritin light chain
Target Mapping	Protein
Units	nM

Result group:

Component Name	Value
Activity Type	Potency
Assay Source	PubChem BioAssays
Assay Type	ADMET
Curation	Autocuration
Description	PubChem BioAssay. qHTS Assay for Inhibitors and Substrates of Cytochrome P450 2D6. (Class of assay: confirmatory) [Related pubchem assays: 410]
Operator	=
Organism	Homo sapiens
Reference	PubChem BioAssay data set () :-
Target	Cytochrome P450 2D6
Target Mapping	Protein
Units	nM

Result group:

Component Name	Value
Activity Type	IC50
Assay Source	Scientific Literature
Assay Type	Functional
Curation	Autocuration
Description	Inhibition of inosine/L-alanine-induced Bacillus anthracis Sterne 34F2 spore germination pretreated for 15 mins before inosine/L-alanine challenge
Operator	=
Reference	Antimicrob. Agents Chemother. (2010) 12:5329-5336
Target Mapping	Unassigned
Units	nM

Result group:

Component Name	Value
Activity Type	IC50
Assay Source	Scientific Literature
Assay Type	Functional
Curation	Autocuration
Description	Antibacterial activity against Bacillus anthracis Sterne 34F2 infected in mouse J774A.1 cells assessed as protection against bacteria-induced cytotoxicity using propidium iodide staining after 3 hrs measured every hours for up to 7 hrs
Reference	Antimicrob. Agents Chemother. (2010) 12:5329-5336
Target Mapping	Unassigned

Result group:

Component Name	Value
Activity Type	Activity
Assay Source	Scientific Literature
Assay Type	ADMET
Cell Line	J774.A1
Curation	Autocuration
Description	Cytotoxicity against mouse J774A1 cells
Organism	Mus musculus
Reference	Antimicrob. Agents Chemother. (2010) 12:5329-5336
Target	J774.A1 (Macrophage cells)
Target Mapping	Non-molecular

Result group:

Component Name	Value
Activity Type	Potency
Assay Source	PubChem BioAssays
Assay Type	Functional
Curation	Autocuration
Description	PubChem BioAssay. qHTS Assay to Find Inhibitors of Chronic Active B-Cell Receptor Signaling. (Class of assay: confirmatory) [Related pubchem assays (depositor defined):AID485345, AID485355]
Reference	PubChem BioAssay data set () :-
Target Mapping	Unassigned
Units	uM

Use

ABC (American Bird Conservancy) Pesticide Toxicity Data Table

Result group:

Component Name	Value
If extrapolated, # species.	1
Pesticide type	Plant growth regulator

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Australian government APVMA approved active substances

Result group:

Component Name	Value
Approval Holder	Valent Biosciences A Div Of Sumitomo Chemical Australia
Approval No.	44449
Manufacturing Site	Abbott Laboratories Chemical ; Agricultural Products Div. 1401 Sheridan Road North Chicago Il 60064 Usa

Result group:

Component Name	Value
Approval Holder	Bloomfresh Pty Ltd
Approval No.	44598
Manufacturing Site	Krishi Rasayan (bihar) Shed 2a Large Industrial Estate Rk Ashram, Muzzaffarpur, Bihar India

Result group:

Component Name	Value
Approval Holder	Valent Biosciences A Div Of Sumitomo Chemical Australia
Approval No.	51841
Manufacturing Site	Zhejiang Shenghua Biok Biology Co. Ltd No.1 Zhongguan Industrial Park Deqing, Zhejiang Province 313220 Pr China

Result group:

Component Name	Value
Approval Holder	Valent Biosciences A Div Of Sumitomo Chemical Australia
Approval No.	51842
Manufacturing Site	Borregaard Synthesis Inc 9 Opportunity Way Newburyport, Massachusetts 10950 Usa

Result group:

Component Name	Value
Approval Holder	Farmoz Pty Limited
Approval No.	53351
Manufacturing Site	Shanghai No. 18 Pharmaceutical Factory No. 804 Bao San Road Shanghai 200081 Pr China

Result group:

Component Name	Value
Approval Holder	Valent Biosciences A Div Of Sumitomo Chemical Australia
Approval No.	61044
Manufacturing Site	Valent Biosciences Corporation Sichuan Guoguang Agrochemical Co Ltd 28 Dongfeng Rd Jian Yang City Sichuan 641400 China

Result group:

Component Name	Value
Approval Holder	Fine Agrochemicals Limited
Approval No.	62241
Manufacturing Site	Taizhou Dapeng Pharmaceutical Industry Co Ltd Yanhui Industrial Zone Linhai City Zhejiang Province 317016 China

EPA Biopesticide Fact Sheets URL

Result group:

Component Name	Value
EPA Pesticide Fact Sheet (PFS) Biopesticide URL	External Link
EPA Pesticide Reregistration Eligibility Decision (RED) Factsheet URL	External Link

EPA Pesticide Reregistration Status

Result group:

Component Name	Value
Case Number	case 2040
Status	RED (Reregistration Eligibility Decisions) signed (06/1994)
Type	plant growth regulator

EPA Pesticide Reregistration eligibility documents

Result group:

Component Name	Value
Fact Sheet URL	External Link
RED URL	External Link

EPA Inert Ingredients

Result group:

Component Name	Value
Relevant FR citation	40 CFR Part 180

EPA Registration Review: Schedule for Beginning Reviews - 2011 to 2014 (Biochemicals)

Result group:

Component Name	Value
Baseline Date	06/01/94
First Registered	03/05/85
Fiscal Year Schedule	2011
PC Code	116901
RED Status	Completed
RED Status Date	06/01/94
Registration Review Case Name	Benzyladenine

EPA OPPIN Active Pesticides Information (related to registration)

Result group:

Component Name	Value
Classification	BIOCHEMICAL
First Registered	11-May-84
PC Code	PCCCODE_116901
Pesticide Category	PLANT GROWTH REGULATOR
Registration Review Case Number	2040

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

EPA OPPIN Food Use Tolerances

Result group:

Component Name	Value
CFR Citation	180.115
Commodity	APPLE
Current Status	Exempted (02-Apr-2004)
PC Code	PCCCODE 116901
Tolerance Type	Permanent Tolerance

Result group:

Component Name	Value
CFR Citation	180.115
Commodity	PISTACHIO
Current Status	Exempted (02-Apr-2004)
PC Code	PCCCODE 116901
Tolerance Type	Permanent Tolerance

FDA Pestrak Files - CFSAN pesticide data

Result group:

Component Name	Value
Metabolite Status	parent
Use	plant growth regulator

Title 40 US CFR part 185 citation for FDA pesticides of interest

Result group:

Component Name	Value
40 CFR 180	revoked
Other Status	foreign use?

National Center for Food and Agricultural Policy (NCFAP) National Pesticide Use Database for 1997

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
Reference	999
State	CONNECTICUT

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
Reference	999
State	IDAHO

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
Reference	6
State	WASHINGTON

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
Reference	6
State	MICHIGAN

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
Reference	6
State	PENNSYLVANIA

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
Reference	999
State	MAINE

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
Reference	999
State	NEW HAMPSHIRE

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
Reference	999
State	NEW YORK

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Reference 999
State OHIO

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
Reference	999
State	OREGON

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
Reference	999
State	VIRGINIA

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
Reference	999
State	WEST VIRGINIA

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
Reference	999
State	INDIANA

National Center for Food and Agricultural Policy (NCFAP) National Pesticide Use Database for 1992

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	CONNECTICUT

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	IDAHO

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	WASHINGTON

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	MICHIGAN

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	PENNSYLVANIA

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	MAINE

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	NEW HAMPSHIRE

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	NEW YORK

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	OHIO

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	OREGON

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	VIRGINIA

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	WEST VIRGINIA

Result group:

Component Name	Value
Crop	APPLES
Pesticide type	OTHER PESTICIDES
State	INDIANA

UK Pesticide Properties Database

Result group:

Component Name	Value
Pesticide data page URL	External Link

Result group:

Component Name	Value
Pesticide data page URL	External Link

UK Chemical Type (pesticides)

Result group:

Component Name	Value
Category	Pesticide active ingredient

Result group:

Component Name	Value
Category	Biopesticides

USDA Agricultural Chemical Usage - Field Crops (2007)

Result group:

Component Name	Value
Applications (apples)	1.3
Area applied (apples) (%)	23
Pesticide type	Other Chemicals
Rate per application (apples)	0.034
Rate per crop year (apples)	0.043
Total applied (apples)	2.9

USDA Agricultural Chemical Usage - Field Crops (2003)

Result group:

Component Name	Value
Applications (Fall potatoes)	1.4
Applications (Upland cotton)	1.1
Area applied (Fall potatoes) (%)	*
Area applied (Upland cotton) (%)	*
Pesticide type	Other Chemicals
Rate per application (Fall potatoes)	(3/)
Rate per application (Upland cotton)	(4/)
Rate per crop year (Fall potatoes)	(3/)
Rate per crop year (Upland cotton)	(4/)
Total applied (Fall potatoes)	(2/)
Total applied (Upland cotton)	(2/)

USDA Agricultural Chemical Usage - Fruit Crops (2005)

Result group:

Component Name	Value
Area applied (Apples) (%)	19
Pesticide type	Other Chemicals
Rate per application (Apples)	0.041
Rate per crop year (Apples)	0.046
Total applied (Apples)	2.7

USDA Agricultural Chemical Usage - Fruit Crops (2003)

Result group:

Component Name	Value
Area applied (Apples) (%)	18
Pesticide type	Other Chemicals
Rate per application (Apples)	0.03
Rate per crop year (Apples)	0.03
Total applied (Apples)	1.8

USDA Agricultural Chemical Usage - Fruit Crops (2001)

Result group:

Component Name	Value
Area applied (Apples) (%)	20
Pesticide type	Other Chemicals
Total applied (Apples)	2.2999999999999998

USDA Agricultural Chemical Usage - Fruit Crops (1999)

Result group:

Component Name	Value
Area applied (Apples) (%)	3
Pesticide type	Other Chemicals

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Total applied (Apples)

0.6

USDA Agricultural Chemical Usage - Fruit Crops (1997)

Result group:

Component Name	Value
Area applied (Apples) (%)	2
Pesticide type	Other Chemicals

USDA NASS Agricultural Chemical Use Survey for Nursery and Floriculture Crops, 2009

Result group:

Component Name	Value
Amount	(Z)
Chemical Class	CHEMICAL, OTHER
Crop	NURSERY ; FLORICULTURE TOTALS
EPA PC-Code	116901
State	MULTI-STATE

Result group:

Component Name	Value
Amount	(Z)
Chemical Class	CHEMICAL, OTHER
Crop	NURSERY TOTALS
EPA PC-Code	116901
State	MULTI-STATE

Result group:

Component Name	Value
Amount	(D)
Chemical Class	CHEMICAL, OTHER
Crop	PROPAGATIVE MATERIAL, NURSERY
EPA PC-Code	116901
State	MULTI-STATE

Result group:

Component Name	Value
Amount	(D)
Chemical Class	CHEMICAL, OTHER
Crop	TRANSPLANTS, COMMERCIAL, VEGETABLE ; STRAWBERRY
EPA PC-Code	116901
State	MULTI-STATE

Result group:

Component Name	Value
Amount	(D)
Chemical Class	CHEMICAL, OTHER
Crop	WOODY ORNAMENTALS ; VINES, OTHER
EPA PC-Code	116901
State	MULTI-STATE

Result group:

Component Name	Value
Amount	(Z)
Chemical Class	CHEMICAL, OTHER
Crop	FLORICULTURE TOTALS
EPA PC-Code	116901
State	MULTI-STATE

Result group:

Component Name	Value
Amount	(Z)
Chemical Class	CHEMICAL, OTHER
Crop	BEDDING PLANTS, ANNUAL
EPA PC-Code	116901
State	MULTI-STATE

Result group:

Component Name	Value
Amount	(Z)
Chemical Class	CHEMICAL, OTHER
Crop	BEDDING PLANTS, HERBACEOUS PERENNIAL
EPA PC-Code	116901
State	MULTI-STATE

Result group:

Component Name	Value
Amount	(D)
Chemical Class	CHEMICAL, OTHER
Crop	CUT FLOWERS
EPA PC-Code	116901
State	MULTI-STATE

Result group:

Component Name	Value
Amount	(Z)
Chemical Class	CHEMICAL, OTHER
Crop	FLOWERING PLANTS, POTTED, INDOOR
EPA PC-Code	116901
State	MULTI-STATE

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Result group:

Component Name	Value
Amount	(D)
Chemical Class	CHEMICAL, OTHER
Crop	FOLIAGE PLANTS, INDOOR
EPA PC-Code	116901
State	MULTI-STATE

Result group:

Component Name	Value
Amount	(Z)
Chemical Class	CHEMICAL, OTHER
Crop	PROPAGATIVE MATERIAL, FLORICULTURE
EPA PC-Code	116901
State	MULTI-STATE

USDA NASS Agricultural Chemical Use Survey for Fruit Crops, 2009

Result group:

Component Name	Value
Applications	(D)
Crop	APPLES
EPA PC Code	116901
Percent coverate	(D)
Pesticide type	CHEMICAL, OTHER
Rate per application	(D)
Rate per crop year	(D)
State	CALIFORNIA
Total applied	(D)

Result group:

Component Name	Value
Applications	1.1000000000000001
Crop	APPLES
EPA PC Code	116901
Percent coverate	11
Pesticide type	CHEMICAL, OTHER
Rate per application	0.059
Rate per crop year	0.062
State	MICHIGAN
Total applied	300

Result group:

Component Name	Value
Applications	2.4
Crop	APPLES
EPA PC Code	116901
Percent coverate	12
Pesticide type	CHEMICAL, OTHER
Rate per application	0.029
Rate per crop year	0.069
State	NORTH CAROLINA
Total applied	100

Result group:

Component Name	Value
Applications	1.2
Crop	APPLES
EPA PC Code	116901
Percent coverate	21
Pesticide type	CHEMICAL, OTHER
Rate per application	0.032
Rate per crop year	0.038
State	OREGON
Total applied	(Z)

Result group:

Component Name	Value
Applications	1.2
Crop	APPLES
EPA PC Code	116901
Percent coverate	16
Pesticide type	CHEMICAL, OTHER
Rate per application	0.039
Rate per crop year	0.046
State	PENNSYLVANIA
Total applied	200

Result group:

Component Name	Value
Applications	1.4
Crop	PEARS
EPA PC Code	116901
Percent coverate	3
Pesticide type	CHEMICAL, OTHER

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Rate per application	0.076
Rate per crop year	0.104
State	OREGON
Total applied	100

ChEMBL activity data

Result group:

Component Name	Value
Activity Type	IC50
Assay Source	Scientific Literature
Assay Type	Binding
Curation	Expert
Description	Inhibitory activity (IC50) against human phosphatidylinositol 4-kinase at the ATP binding site
Operator	=
Organism	Homo sapiens
Reference	J. Med. Chem. (1990) 8:2073-2080
Target	PI4-kinase type II beta
Target Mapping	Homologous protein
Units	nM

Result group:

Component Name	Value
Activity Type	Ki
Assay Source	Scientific Literature
Assay Type	Binding
Curation	Expert
Description	Binding affinity (Ki) against human phosphatidylinositol 4-kinase
Operator	=
Organism	Homo sapiens
Reference	J. Med. Chem. (1990) 8:2073-2080
Target	PI4-kinase type II beta
Target Mapping	Homologous protein
Units	nM

Result group:

Component Name	Value
Activity Type	Vmax
Assay Source	Scientific Literature
Assay Type	ADMET
Curation	Autocuration
Description	Vmax value was determined
Operator	=
Reference	J. Med. Chem. (1990) 8:2073-2080
Target Mapping	Unassigned
Units	c.p.m.

Result group:

Component Name	Value
Activity Type	Km
Assay Source	Scientific Literature
Assay Type	Binding
Curation	Expert
Description	Inhibition of Phosphatidylinositol 4-kinase at the ATP binding site
Operator	=
Organism	Homo sapiens
Reference	J. Med. Chem. (1990) 8:2073-2080
Target	PI4-kinase type II beta
Target Mapping	Multiple proteins
Units	nM

Result group:

Component Name	Value
Activity Type	IC50
Assay Source	Scientific Literature
Assay Type	Binding
Curation	Expert
Description	Inhibitory activity against purified cdc2 p34/Cyclin B obtained from M phase oocytes of the starfish <i>Marthasterias glacialis</i> .
Operator	=
Organism	Homo sapiens
Reference	J. Med. Chem. (1997) 4:408-412
Target	Cyclin-dependent kinase 1
Target Mapping	Homologous protein
Units	nM

Result group:

Component Name	Value
Activity Type	IC50
Assay Source	Scientific Literature
Assay Type	Functional
Cell Line	HL-60
Curation	Autocuration
Description	Antiproliferative activity against human HL60 cells

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Operator >
Organism Homo sapiens
Reference Bioorg. Med. Chem. Lett. (2007) 7:1934-1937
Target HL-60 (Promyeloblast leukemia cells)
Target Mapping Non-molecular
Units nM

Result group:

Component Name	Value
Activity Type	Kcat/Km
Assay Source	Scientific Literature
Assay Type	Binding
Curation	Autocuration
Description	Ratio Kcat to Km for Zea mays CKX1 receptor
Operator	=
Organism	Zea mays
Reference	Bioorg. Med. Chem. (2009) 5:1938-1947
Target	Cytokinin dehydrogenase 1
Target Mapping	Protein

Result group:

Component Name	Value
Activity Type	Km
Assay Source	Scientific Literature
Assay Type	Binding
Curation	Autocuration
Description	Activity at Zea mays CKX1 expressed in Pichinia pastonis assessed as aldehyde production by 4-aminophenol assay
Operator	=
Organism	Zea mays
Reference	Bioorg. Med. Chem. (2009) 5:1938-1947
Target	Cytokinin dehydrogenase 1
Target Mapping	Protein
Units	nM

Result group:

Component Name	Value
Activity Type	Kcat
Assay Source	Scientific Literature
Assay Type	Binding
Curation	Autocuration
Description	Activity at Zea mays CKX1 expressed in Pichinia pastonis assessed as aldehyde production by 4-aminophenol assay
Operator	=
Organism	Zea mays
Reference	Bioorg. Med. Chem. (2009) 5:1938-1947
Target	Cytokinin dehydrogenase 1
Target Mapping	Protein
Units	s-1

Result group:

Component Name	Value
Activity Type	Activity
Assay Source	Scientific Literature
Assay Type	Binding
Curation	Autocuration
Description	Binding affinity to Candida albicans CaCdr1p expressed in yeast AD1-8u
Reference	Eur. J. Med. Chem. (2010) 11:4813-4826
Target Mapping	Unassigned

Result group:

Component Name	Value
Activity Type	Activity
Assay Source	Scientific Literature
Assay Type	Binding
Curation	Autocuration
Description	Binding affinity to Candida albicans CaMdr1p expressed in yeast AD1-8u
Reference	Eur. J. Med. Chem. (2010) 11:4813-4826
Target Mapping	Unassigned

Result group:

Component Name	Value
Activity Type	IZ
Assay Source	Scientific Literature
Assay Type	Functional
Curation	Autocuration
Description	Antifungal activity against yeast AD1-8u expressing Candida albicans CaCdr1p by agar disk diffusion assay
Operator	=
Organism	Saccharomyces cerevisiae
Reference	Eur. J. Med. Chem. (2010) 11:4813-4826
Target	Saccharomyces cerevisiae
Target Mapping	Non-molecular
Units	cm

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Result group:

Component Name	Value
Activity Type	IZ
Assay Source	Scientific Literature
Assay Type	Functional
Curation	Autocuration
Description	Antifungal activity against yeast AD1-8u expressing Candida albicans CaMdr1p by agar disk diffusion assay
Operator	=
Organism	Saccharomyces cerevisiae
Reference	Eur. J. Med. Chem. (2010) 11:4813-4826
Target	Saccharomyces cerevisiae
Target Mapping	Non-molecular
Units	cm

Result group:

Component Name	Value
Activity Type	Potency
Assay Source	PubChem BioAssays
Assay Type	Functional
Curation	Autocuration
Description	PubChem BioAssay. qHTS Assay for Modulators of Lamin A Splicing. (Class of assay: confirmatory)
Operator	=
Organism	Homo sapiens
Reference	PubChem BioAssay data set () :-
Target	Prelamin-A/C
Target Mapping	Protein
Units	nM

Result group:

Component Name	Value
Activity Type	Potency
Assay Source	PubChem BioAssays
Assay Type	Functional
Curation	Autocuration
Description	PubChem BioAssay. qHTS Assay for Agonists of the Thyroid Stimulating Hormone Receptor. (Class of assay: confirmatory)
Operator	=
Organism	Homo sapiens
Reference	PubChem BioAssay data set () :-
Target	Thyroid stimulating hormone receptor
Target Mapping	Protein
Units	nM

Result group:

Component Name	Value
Activity Type	Potency
Assay Source	PubChem BioAssays
Assay Type	Functional
Curation	Autocuration
Description	PubChem BioAssay. qHTS Assay for Lipid Storage Modulators in Drosophila S3 Cells. (Class of assay: confirmatory)
Operator	=
Reference	PubChem BioAssay data set () :-
Target Mapping	Unassigned
Units	nM

Result group:

Component Name	Value
Activity Type	Potency
Assay Source	PubChem BioAssays
Assay Type	Binding
Curation	Autocuration
Description	PubChem BioAssay. qHTS Assay for Identification of Novel General Anesthetics. In this assay, a GABAergic mimetic model system, apoferritin and a profluorescent 1-aminoanthracene ligand (1-AMA), was used to construct a competitive binding assay for identification of novel general anesthetics (Class of assay: confirmatory) [Related pubchem assays: 2385 (Probe Development Summary for Identification of Novel General Anesthetics), 2323 (Validation apoferritin assay run on SigmaAldrich LOPAC1280 collection)]
Operator	=
Organism	Equus caballus
Reference	PubChem BioAssay data set () :-
Target	Ferritin light chain
Target Mapping	Protein
Units	nM

Result group:

Component Name	Value
Activity Type	Potency
Assay Source	PubChem BioAssays
Assay Type	ADMET
Curation	Autocuration

Chemical Summary: benzyl(purin-6-yl)amine (1214-39-7)

Description	PubChem BioAssay. qHTS Assay for Inhibitors and Substrates of Cytochrome P450 2D6. (Class of assay: confirmatory) [Related pubchem assays: 410]
Operator	=
Organism	Homo sapiens
Reference	PubChem BioAssay data set () :-
Target	Cytochrome P450 2D6
Target Mapping	Protein
Units	nM

Result group:

Component Name	Value
Activity Type	IC50
Assay Source	Scientific Literature
Assay Type	Functional
Curation	Autocuration
Description	Inhibition of inosine/L-alanine-induced Bacillus anthracis Sterne 34F2 spore germination pretreated for 15 mins before inosine/L-alanine challenge
Operator	=
Reference	Antimicrob. Agents Chemother. (2010) 12:5329-5336
Target Mapping	Unassigned
Units	nM

Result group:

Component Name	Value
Activity Type	IC50
Assay Source	Scientific Literature
Assay Type	Functional
Curation	Autocuration
Description	Antibacterial activity against Bacillus anthracis Sterne 34F2 infected in mouse J774A.1 cells assessed as protection against bacteria-induced cytotoxicity using propidium iodide staining after 3 hrs measured every hours for up to 7 hrs
Reference	Antimicrob. Agents Chemother. (2010) 12:5329-5336
Target Mapping	Unassigned

Result group:

Component Name	Value
Activity Type	Activity
Assay Source	Scientific Literature
Assay Type	ADMET
Cell Line	J774.A1
Curation	Autocuration
Description	Cytotoxicity against mouse J774A1 cells
Organism	Mus musculus
Reference	Antimicrob. Agents Chemother. (2010) 12:5329-5336
Target	J774.A1 (Macrophage cells)
Target Mapping	Non-molecular

Result group:

Component Name	Value
Activity Type	Potency
Assay Source	PubChem BioAssays
Assay Type	Functional
Curation	Autocuration
Description	PubChem BioAssay. qHTS Assay to Find Inhibitors of Chronic Active B-Cell Receptor Signaling. (Class of assay: confirmatory) [Related pubchem assays (depositor defined):AID485345, AID485355]
Reference	PubChem BioAssay data set () :-
Target Mapping	Unassigned
Units	uM
Data Collection	Note

External Searches by Name or CAS

[TOXNET CCRIS](#)
[TOXNET DART ETIC](#)
[TOXNET EMIC](#)
[TOXNET GENETOX](#)
[TOXNET HazMap](#)
[TOXNET Household Products](#)
[TOXNET HSDB](#)
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[EPA Substance Registry System \(EPA SRS\)](#)